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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/775,879	02/02/2001	Sunghwa Choe	2225-0003	3956

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EXAMINER

BAUM, STUART F

ART UNIT PAPER NUMBER

1638

DATE MAILED: 11/06/2002 14

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/775,879

Applicant(s)

CHOE ET AL.

Examiner

Stuart F. Baum

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 08 August 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-56 is/are pending in the application.
- 4a) Of the above claim(s) 6,7,9,11,13,15,17,19,21,23-35 and 54-56 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6,8,10,12,14,16,18,20,22 and 36-53 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2. 6) ☐ Other: \_\_\_\_\_

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The amendment filed August 8, 2002 including the Choe and Feldman 37 CFR 1.131 Declaration has been entered.

Claims 1-56 are pending

Claims 36-56 have been added.

Newly submitted claims 54-56 directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: The new claims are drawn to a sequence not originally presented in the original claims.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 54-56 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Claims 6-7, 9, 11, 13, 15, 17, 19, 21, and 23-35 are withdrawn from consideration as being drawn to non-elected material.

Claims 1-5 and 18 have been amended.

Claims 1-6, 8, 10, 12, 14, 16, 18, 20, 22, and 36-53 will be examined in the present office action.

The text of those sections of Title 35, U.S. Code not included in this office action can be found in a prior office action.

Claims 1, 8, 10, 12, 14, and 16 remain rejected and new claims 52 and 53 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the

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specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. This rejection is maintained for the reasons of record set forth in the Official action mailed 4/24/2002. Applicant's arguments filed 8/8/2002 have been fully considered but they are not persuasive.

Applicants assert that they have complied with the Written Description requirement by providing the sequence as presented in SEQ ID NO:20 and 21 for one skilled in the art to visualize or recognize the identity of the claimed isolated polynucleotides (page 9, 1<sup>st</sup> full paragraph and sentence bridging page 9 and 10).

The Examiner disagrees with the Applicants. Because of the broad claim language, just displaying a sequence is not enough of a description of the claimed sequence. Applicant has not pointed out which amino acids are required and must not be changed to produce a functional protein and along with that information, what sequences of the encoding polynucleotide must be present for the included methods to work. Applicant is claiming sequences that have 70% sequence identity to SEQ ID NO:20 or a fragment comprising 15 contiguous nucleotides. Applicant has not taught which 15 nucleotides are conserved and can be used in the invention or which part of the sequence has to be included in a sequence exhibiting 70% sequence identity. Applicant has not disclosed enough information about the sequences to demonstrate to the Examiner that Applicant was in possession of their invention at the time the application was filed.

Claims 1-5, 8, 10, 12, 14, 16, 18, 20, and 22 remain rejected and new claims 36-53 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not

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described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. This rejection is maintained for the reasons of record set forth in the Official action mailed 4/24/2002.

Applicant's arguments filed 8/8/2002 have been fully considered but they are not persuasive.

The Applicants contend that the claims are rejected based on the recitation of 70% identity to SEQ ID NO:20 and because Applicants have not taught how to transform a plant with a claimed sequence to either increase or decrease sterol levels relative to untransformed plants. Applicants assert that claims drawn to a polynucleotide, vector, transformed host cell and method of producing a DWF7 polypeptide should not be rejected under 112 first paragraph because the claims are not drawn to a transformed plant. Also, Applicants believe that because claim 14 and 16 pertain to a transgenic plant and method of producing a transgenic plant without specifying a phenotype that they should not have been rejected. Applicants summarize the experiments already performed in the specification, i.e., the initial mutagenesis and the analysis of the *dwf7-1* mutant and thus believe that this enables claims 14 and 16 (paragraph bridging pages 11 and 12).

The Examiner disagrees with the Applicant. Disclosing a mutagenesis experiment and morphological analyses of a selected mutant does not enable one skilled in the art to use the claimed invention. Applicant has not reduced their invention to practice. Applicant has not taught one skilled in the art how to take their invention and use it or what one would do with a vector, or host cell comprising a nucleic acid of bases 143-322 or 143-1552 of SEQ ID NO:20. Applicants have further not shown how one would create a dominant-negative mutant comprising transforming a plant with a before mentioned sequence, not to mention a sequence

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exhibiting 70% sequence identity or a sequence comprising 15 nucleotides of SEQ ID NO:20.

For the reasons stated in the previous office action, it would require undue experimentation for one skilled in the art to make and/or use the claimed invention without further guidance or examples.

The rejection of claims 1-5, 8, 10, 12, 14, 16, 18, 20, and 22 under 35 U.S.C. 102(b) as being anticipated by Husselstein et al (1999, Plant Molecular Biology 39:891-906) is withdrawn based on Applicants 37 CFR 1.131 Declaration.

No claims are allowed.

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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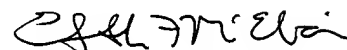
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stuart Baum whose telephone number is (703) 305-6997. The examiner can normally be reached on Monday-Friday 8:30AM – 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amy Nelson can be reached on (703) 306-3218. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-3014 or (703) 305-3014 for regular communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the legal analyst, Sonya Williams, whose telephone number is (703) 305-2272.

Stuart Baum Ph.D.

October 28, 2002

  
**ELIZABETH F. McELWAIN**  
**PRIMARY EXAMINER**  
**GROUP 1600**